

IN THE SPECIFICATION:

Page 1, after the title, please insert the following paragraph:

-- This application is a division of prior application serial no. 09/508,458 which is a §371 of International Application No. **PCT/JP99/03794** filed **July 14, 1999**.

Please replace the paragraph beginning at page 14, line 23, with the following rewritten paragraph:

Fig. 5A is a photomicrograph of the texture showing a cast structure of a tip end portion ~~A~~ B1 of example (1) of a cast product;

Please replace the paragraph beginning at page 14, line 25, with the following rewritten paragraph:

Fig. 5B is a photomicrograph of the texture showing a cast structure of an intermediate portion ~~B~~ B2 of example (1) of the cast product;

Please replace the paragraph beginning at page 15, line 3, with the following rewritten paragraph:

Fig. 5C is a photomicrograph of the texture showing a cast structure of a base end portion ~~C~~ B3 of example (1) of the cast product;

Please replace the paragraph beginning at page 15, line 6, with the following rewritten paragraph:

Fig. 6A is a photomicrograph of the texture showing a cast structure of a tip end portion A B1 of example (1a) of the cast product;

Please replace the paragraph beginning at page 15, line 8, with the following rewritten paragraph:

Fig. 6B is a photomicrograph of the texture showing a cast structure of an intermediate portion B B2 of example (1a) of the cast product;

Please replace the paragraph beginning at page 15, line 11, with the following rewritten paragraph:

Fig. 6C is a photomicrograph of the texture showing a cast structure of a base end portion C B3 of example (1a) of the cast product;

Please replace the paragraph beginning at page 15, line 14, with the following rewritten paragraph:

Fig. 7A is a photomicrograph of the texture showing a first example of a thermally treated structure in the base end portion C B3 of example (1) of the cast product;

Please replace the paragraph beginning at page 15, line 17, with the following rewritten paragraph:

Fig. 7B is a photomicrograph of the texture showing a first example of a thermally treated structure in the base end portion $\in \underline{B3}$ of example (1a) of the cast product;

Please replace the paragraph beginning on page 15, line 20, with the following rewritten paragraph:

Fig. 8A is a photomicrograph of the texture showing a second example of a thermally treated structure in the base end portion $\in \underline{B3}$ of example (1) of the cast product;

Please replace the paragraph beginning on page 15, line 23, with the following rewritten paragraph:

Fig. 8B is a photomicrograph of the texture showing a second example of a thermally treated structure in the base end portion $\in \underline{B3}$ of example (1a) of the cast product;

Please replace the paragraph beginning on page 15, line 26, with the following rewritten paragraph:

Fig. 9A is a photomicrograph of the texture showing a third example of a thermally treated structure in the base end portion $\in \underline{B3}$ of example (1) of the cast product;

Please replace the paragraph beginning on page 16, line 3, with the following rewritten paragraph:

Fig. 9B is a photomicrograph of the texture showing a third example of a thermally treated structure in the base end portion € B2 of example (1a) of the cast product;

Please replace Table 2 on page 25 with the following rewritten Table 2

Table 2

Base end portion of cast product	Graphite area rate (%)	Hardness HB	Charpy impact value (J/cm ²)	Young's modulus (GPa)
Fig. 7A	4.3	153	9.0 <u>12.3</u>	180
Fig. 7B	4.3	162	7.0 <u>10.0</u>	180
Fig. 8A	4.1	260	7.8	183
Fig. 8B	4.1	285	5.5	183
Fig. 9A	3.0	192	8.0	188
Fig. 9B	2.5	298	2.1	193

Please insert the following heading on page 34, between lines 16 and 17:

- - A. Heating test - -

Please replace the paragraph beginning on page 35, line 6, with the following rewritten paragraph:

Then, a columnar Fe-based alloy material 5₀ having a diameter D of 50 mm and a length L of 65 mm as shown in Fig. 20 was fabricated from the continuously-cast material, and

thermocouples were embedded into one ~~5b~~ 5a of end surfaces and an outer peripheral surface ~~5c~~ 5b of the material 5_0 , respectively. The position of the thermocouple in the end surface 5a is a point E at a depth of 5 mm from the center O of the end surface, while the position of the thermocouple in the outer peripheral surface 5b is a point F at a depth of 5 mm from a bisected position in the direction of a generating line. During heating of the material 5_0 , the temperature of the point E is lowest, and this temperature is a criterion in the casting process. Therefore, the point E is defined as a casting reference-temperature point. The point F is a site which is heated to the highest temperature in the induction heating and hence, the point F is defined as the highest-temperature point.

Please replace the paragraph beginning on page 37, line 13, with the following rewritten paragraph:

Then, for comparison, an Fe-based alloy material fabricated from the die-cast material was heated to 740°C (the point A_1) at an average heating rate set at $11.74^{\circ}\text{C}/\text{sec}$, and the relationship between the average temperature of the material and the difference ΔT between the temperature at the casting reference-temperature point E and the highest-temperature point F was examined, thereby providing a result shown in Fig. 24. In this case, the maximum value ΔT_{max} of the temperature differences ΔT was 463.4°C and hence, the maximum temperature gradient T_G was $13.6^{\circ}\text{C}/\text{mm}$, but cracks were not generated in the material. This is attributed to the absence of a chilled structure in the material.